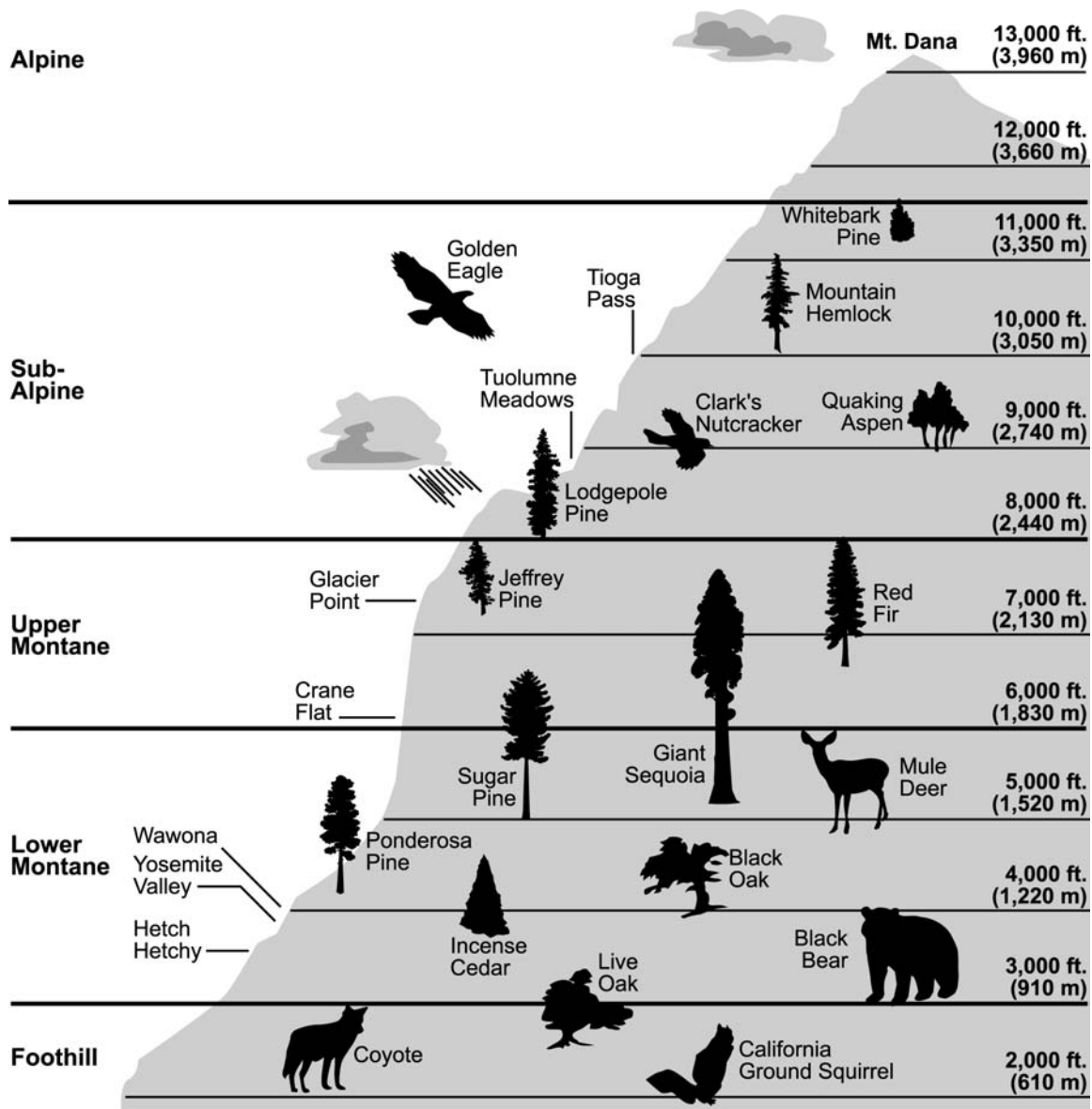


# Plant and Animal Communities



## Foothill: 500 - 3,000 ft.

Acorn Woodpecker and Black Oak

With ample open space and plenty of sunlight, plants of the foothill community survive long, hot summers. Plants are adapted to reduce water loss and prevent heat damage. Extensive root systems and leaves that are leathery, sticky, or hairy conserve moisture. Leathery leaves prevent wilting when water is scarce. During winter and spring, plants take advantage of cooler temperatures and rainfall. Many animals migrate to foothill communities to avoid the harsh winters in higher elevations. Common plants in the open grasslands, oak woodlands, and dry chaparral are gray pine, interior live oak, blue oak, scrub oak, toyon, and shrub manzanita. Common wildlife species include California ground squirrel, acorn woodpecker, scrub jay, red-tailed hawk, coyote, mule deer, and striped skunk. Open meadows provide habitat for mice and voles.

**Lower Montane: 3,000 ft. - 6,000 ft.**

Mule Deer and Ponderosa Pine

Often referred to as the mixed conifer forest, this community is dominated by the largest and most diverse conifers (cone bearing trees). Ponderosa pine, sugar pine, white fir, and incense cedar are abundant. Giant sequoias and deciduous trees, such as dogwood, maple, and black oak, are all commonly found in this community. Manzanita and chinquapin shrubs are also present. Rain and snow are abundant and can exceed 50 inches per year. Physical factors such as temperature and humidity play an important role in the diversity of plants in this zone. Young trees compete for light, soil moisture, and nutrients. Fire plays an important part in opening up the forest, increasing space and light, and allowing for healthy competition among trees and shrubs. Wildlife common to this community are mule deer, black bear, raccoon, western gray squirrel, Stellar's jay, and great horned owl. During the spring and summer wildlife often moves between the lower montane community and upper montane and subalpine communities.

**Upper Montane: 6,000 ft. – 8,000 ft.**

Black Bear and Red Fir

The upper montane community is dominated by red fir and lodgepole pine. Other common trees are the western white pine and aspen. This community has cool summers and long, snow-covered winters. The red fir trees create a dense canopy that shades the forest floor, keeping it cool and sparsely vegetated. Sun loving shrubs and trees find it difficult to survive except in areas of open, dry space. Some common species in the lower elevations of this community are mule deer, black bear, golden-mantled ground squirrel, and raven. At higher elevations of the upper montane community there are Douglas squirrel, blue grouse, and yellow-bellied marmot. During the spring and summer, wildlife often moves between the upper montane community and lower montane and subalpine communities. Many wildlife species migrate to lower communities in winter.

**Sub-Alpine: 8,000 ft. – 11,500 ft.**

Belding Ground Squirrel and Lodgepole Pine

Strong wind, cold temperatures, and a very short growing season demand many adaptations of both plants and animals in this community. Many trees are short or even prostrate. Plants must mature and produce seeds quickly during the very short growing season. Frost can set in as early as August. Deep roots, short stems, and tough, often hairy, leaves help some plants survive long periods of drought. Lodgepole pine, mountain hemlock, and whitebark pine are commonly found in this community. Low-growing flowering plants and mats of grass and sedge cover open meadows. Common wildlife includes the Belding ground squirrel, yellow-bellied marmot, pika, and Clark's nutcracker. Harsh winter conditions cause many animals to migrate down to lower communities.

**Alpine: 11,500 feet and above**

Bighorn Sheep

This community is commonly known as "above timberline." Growing conditions are usually too severe for trees to survive, and dwarfed plants grow close to the ground in small clumps or mats. The wildlife hibernates or migrates to lower elevations to survive. The rosy finch is a year-round resident in this community.